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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,464	07/31/2000	Hiroyuki Sayuda	046601-5056	5381

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EXAMINER

THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 01/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,464

Applicant(s)

SAYUDA, HIROYUKI

Examiner

James A Thompson

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed July 31, 2000 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "S305" in figure 16. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry (US Patent 5,710,636) in view of Huttenlocher (US Patent 5,884,014).

Regarding claim 1: Curry discloses an image processing apparatus (figure 1 of Curry), comprising an input part that inputs document data and inputs bitmap data that is to be embedded (column 3, lines 36-45 of Curry). Grayscale image data of the document to be printed is produced by the image generator (figure 1(12) and column 3, lines 37-40 of Curry). Bitmap data corresponding to the image to be embedded is generated by the bitmap generator (figure 1(10) and column 3, lines 40-42 of Curry). Said grayscale image data and said bitmap data is sent to the halftone generator (figure 1(14) and column 3, lines 33-37 of Curry). Although an input part is not specifically shown, it is inherent in the image processing apparatus since said halftone generator would not otherwise be able to receive said grayscale image data and said bitmap data.

Said image processing apparatus further comprises an embedding part (figure 1(14) of Curry) that embeds said coupling information to be superimposed over at least part of the image to form the document image of the document data inputted by said input part (column 5, line 65 to column 6, line 11 of Curry).

Curry does not disclose expressly that said bitmap data is information for specifying related information related to an image element constituting said document image. Furthermore, Curry does not disclose expressly that said coupling information is superimposed over an element of the image.

Huttenlocher discloses embedding data that points to an object (column 16, lines 3-6 of Huttenlocher) that also contains data, such as a spread sheet, a web page, or other such embeddable objects (column 16, lines 7-33 of Huttenlocher). Said object is related to what is displayed at that portion of the page (column 15, line 59 to column 16, line 6 of Huttenlocher).

Curry and Huttenlocher are combinable because they are from the same field of endeavor, namely the processing and presentation of documents and images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to embed bitmap data in the image, as taught by Curry; and embed said bitmap data, which points to an object that also contains data, over a specific portion of the image to which said object relates, as taught by Huttenlocher. The motivation for doing so would have been to make a second set of digital information addressable and available for further use, such as distribution, transmission, storage, and Internet document display (column 5, lines 17-27 of Huttenlocher). Therefore, it would have been obvious to combine Huttenlocher with Curry to obtain the invention as specified in claim 1.

Regarding claim 2: Curry discloses document data and embedding image data into said document data (column 6, lines 1-11 of Curry). Curry does not disclose expressly that said document data contains appearance information that defines the

image formation positions of the image element on the document image. Furthermore, Curry does not disclose expressly that embedding is performed based on said appearance information.

Huttenlocher discloses that said document data contains appearance information that defines the image formation positions of the image element on the document image. Said appearance information is in the form of commands in a page description language (PDL) file (column 6, lines 37-42 of Huttenlocher), said PDL file being part of the document data. PDL files contain information and commands that describe and construct the page layout structure (column 2, lines 21-26 of Huttenlocher).

Huttenlocher further discloses embedding pointers and links based on appearance information, particularly the position and layout of image regions (column 15, line 59 to column 16, line 6 of Huttenlocher).

Curry and Huttenlocher are combinable because they are from the same field of endeavor, namely the processing and presentation of documents and images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to embed image data onto said document data, as taught in Curry; and embed said image data based on the position and layout information, as taught in Huttenlocher. The motivation for doing so would have been to be able to embed pointers to information that directly relates to the portion of the document that the pointer is embedded on (column 15, line 67 to column 16, line 4 of Huttenlocher), thus allowing various digital data objects to be accessible (column 16, lines 22-30). Therefore, it

would have been obvious to combine Huttenlocher with Curry to obtain the invention as specified in claim 2.

Regarding claim 3: Curry discloses embedding information in a document image (column 6, lines 7-11 of Curry). Curry does not disclose expressly that the coupling information indicates a location of the related information.

Huttenlocher discloses pointers that indicate the location of the related information (column 15, line 67 to column 16, line 3; and column 16, lines 22-30 of Huttenlocher).

Curry and Huttenlocher are combinable because they are from the same field of endeavor, namely the processing and presentation of documents and images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make the information that is to be embedded contain location information to the related data. The motivation for doing so would have been that a second set of information can be accessed, said set of information being based upon the pointer information displayed in the related section of the document image (column 15, line 67 to column 16, line 3; and column 16, lines 22-30 of Huttenlocher). Therefore, it would have been obvious to combine Huttenlocher with Curry to obtain the invention as specified in claim 3.

Regarding claim 4: Curry discloses embedding information in a document image (column 6, lines 7-11 of Curry). Curry does not disclose expressly that the coupling information specifies information indicative of a location of the related information.

Huttenlocher discloses storing a pointer that is indicative of the location of the related information (column 15, line 67 to column 16, line 3; and column 16, lines 22-30 of Huttenlocher).

Curry and Huttenlocher are combinable because they are from the same field of endeavor, namely the processing and presentation of documents and images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make the coupling information that is to be embedded at the related areas of the document image specify information that is indicative of the location of the related information. The motivation for doing so would have been that a second set of information can be accessed, said set of information being based upon the pointer information displayed in the related section of the document image (column 15, line 67 to column 16, line 3; and column 16, lines 22-30 of Huttenlocher). Therefore, it would have been obvious to combine Huttenlocher with Curry to obtain the invention as specified in claim 4.

Regarding claim 5: Curry discloses that the coupling information specifies the related information itself (figure 5 and figure 6 of Curry). The information that is related to what is being printed is the information that is embedded in the image and printed on the medium (figure 5, figure 6 and column 5, lines 21-37 of Curry).

Regarding claim 6: Curry discloses that said embedding part embeds the coupling information in a form or color in which the coupling information is difficult to identify visually (column 5, lines 16-20 of Curry).

Regarding claim 7: Curry discloses an image forming medium on which an image constituted by an image element is formed (column 6, lines 1-11 of Curry), wherein coupling information is superimposed over at least part of the image element (figure 5, figure 6 and column 5, lines 21-37 of Curry).

Curry does not disclose expressly that said coupling information is information for specifying related information related to the image element.

Huttenlocher discloses embedding data that points to an object (column 16, lines 3-6 of Huttenlocher) that also contains data, such as a spread sheet, a web page, or other such embeddable objects (column 16, lines 7-33 of Huttenlocher). Said object is related to what is displayed at that portion of the page (column 15, line 59 to column 16, line 6 of Huttenlocher).

Curry and Huttenlocher are combinable because they are from the same field of endeavor, namely the processing and presentation of documents and images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to embed information in the image, as taught by Curry; and embed said information, which points to an object that also contains data, over a specific portion of the image to which said object relates, as taught by Huttenlocher. The motivation for doing so would have been to make a second set of digital information addressable and available for further use, such as distribution, transmission, storage, and Internet document display (column 5, lines 17-27 of Huttenlocher). Therefore, it would have been obvious to combine Huttenlocher with Curry to obtain the invention as specified in claim 7.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kenneth H.P. Chang, US Patent 6,256,398 B1, July 3, 2001.

Powell et al., US Patent 5,721,788, February 24, 1998.

James J. Appel, US Patent 5,278,400, January 11, 1994.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Thompson whose telephone number is 703-305-6329. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-308-5397.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3500.

James A. Thompson
Examiner
Art Unit 2624

JAT
January 9, 2004



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800